Once the desired GEO codes have been entered, click **{OK}** to retrieve the records. The GEO Online Update window appears, displaying the records associated with each GEO code, provided that each one already exists, as shown in Figure 5.3.1.2.3.3-2.

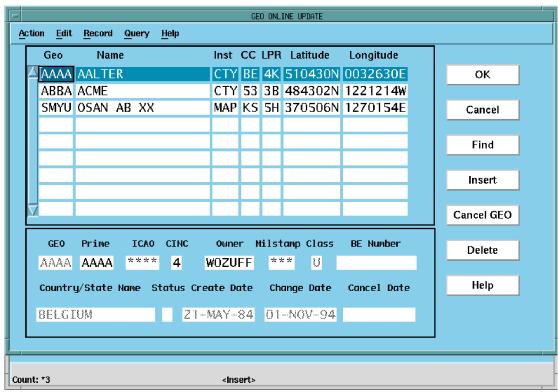


Figure 5.3.1.2.3.3-2. GEO Online Update Window

Updating the Records. Once the records have been retrieved, the user may begin updating data. Notice that not all data are displayed for all records at once. The data across the bottom of the window applies only to the currently highlighted record, as shown in Figure 5.3.1.2.3.3-3. This data always reflects the currently highlighted record.

When leaving any field, by either pressing **[TAB]**, or by using the mouse to click the applicable button desired, data validation checks are performed on that field. If a data error is detected, an alert error message pops up on the window as shown in Figure 5.3.1.2.3.3-4. The user is forced to click **{OK}**, which returns the user to the erroneous field to correct the error.

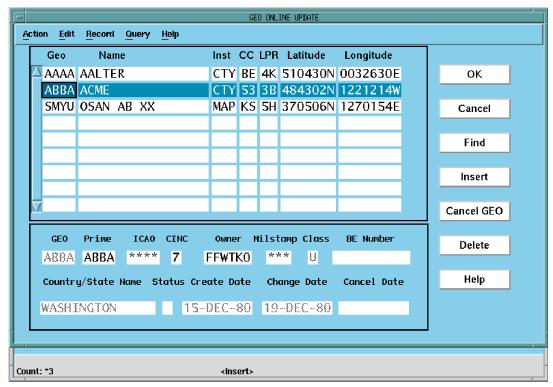


Figure 5.3.1.2.3.3-3. Data Displayed for Highlighted Record

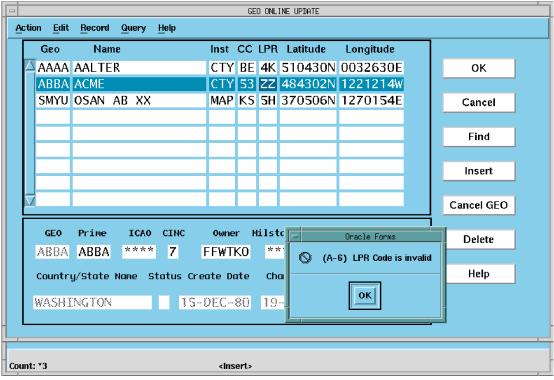


Figure 5.3.1.2.3.3-4. Alert Pop-Up Window - Indicating Data Error

Moving between Records. When moving from record to record, a number of behind the scenes actions take place. First, additional record level data edits are performed on the record. Any detected errors are displayed in the window, giving the user the option to edit the error or to override it, as shown in Figure 5.3.1.2.3.3-5. Once all errors have been individually displayed, if any errors still exist; i.e. changes were not made for errors detected, the GEO Record Errors window appears. It displays all remaining errors for the record and gives the user the option to edit the record or continue and save the record, as is shown in Figure 5.3.1.2.3.3-6. Finally, the record data at the bottom of the window changes to reflect the newly navigated record.

Saving the Records. Once all desired records have been updated, click {OK} to save the updated records. At this point, another set of data validation checks are done for the last record highlighted. If any errors are detected, an alert window pops up for each error, allowing the user to either edit the field related to the error or override the error and continue validation (See Figure 5.3.1.2.3.3-5). After all errors are handled, if any errors still remain for the new record, the GEO Record Errors window pops up (See Figure 5.3.1.2.3.3-6). This window displays the remaining errors, and gives the user the option to edit the erroneous record or continue and save the record with the reported errors.

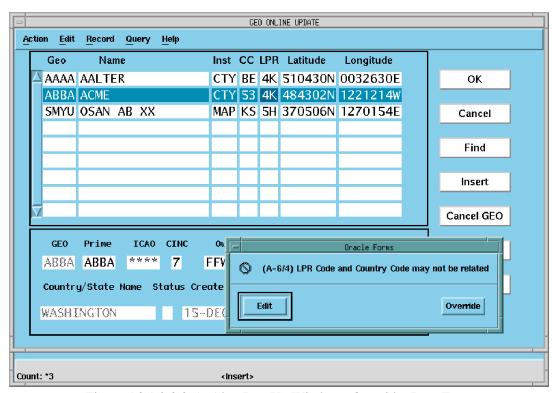


Figure 5.3.1.2.3.3-5. Alert Pop-Up Window - Overrides Data Error

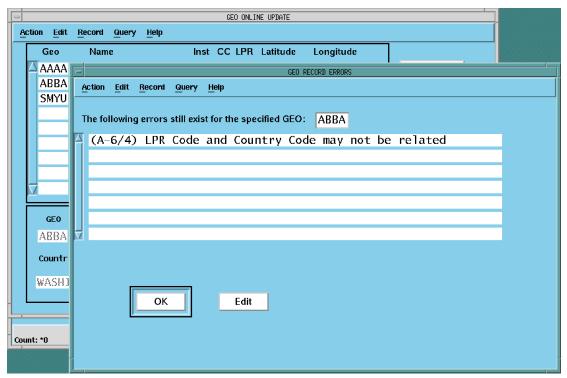


Figure 5.3.1.2.3.3-6. GEO Record Errors Window

If the user clicks **{OK}**, and no errors are detected for the record or the user has decided to override all errors detected for the record, all the records are saved and the user returns to the GEO Online Menu Selection window. A message appears at the bottom of the window, telling the user how many records were committed (saved), as shown in Figure 5.3.1.2.3.3-7.

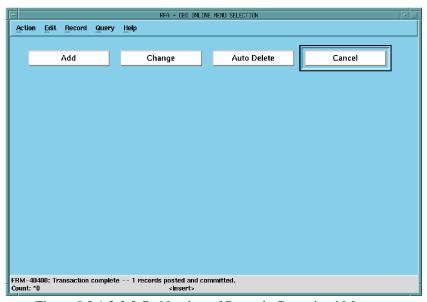


Figure 5.3.1.2.3.3-7. Number of Records Committed Message

Canceling/Exiting. At any time during update of an existing GEO record, the user may click {Cancel},

which, after alerting the user that any changes will be lost, returns the user to the GEO Online Menu Selection window. If, however, the user used the 'Insert' option, and is adding a new GEO record, the same message pops up, but the new record is deleted, and the user returns to the next displayed record.

5.3.1.2.3.4 Adding Multiple GEO Records

To add new GEO Records while in the GEO Online Update window, click {Insert}. A blank record inserts directly below the current record, and the cursor is placed in the first field, allowing the user to begin entering a new GEO record, as shown in Figure 5.3.1.2.3.4.-1. To cancel out of the insert function, click {Cancel}, and the new record is deleted and control returns to the next record displayed.

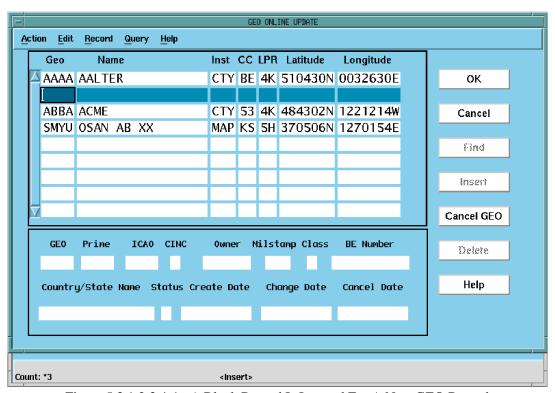


Figure 5.3.1.2.3.4-1. A Blank Record Is Inserted For A New GEO Record

5.3.1.2.3.5 Canceling/Uncanceling GEO Records

From the Single Record Window. To cancel a record from either of the single record windows, Add GEO Record and Change GEO Record, click {Cancel GEO}. The Status field for the record is automatically changed to "C" and the Cancel Date field is automatically filled in with the current date. If the record is already canceled (Status = "C"), the button on the right will read {Uncancel GEO} instead of {Cancel GEO}. Click {Uncancel GEO}. The Cancel Date field is automatically cleared, and the Status field is cleared, indicating that the record is active.

From the Multiple Record Window. To Cancel or Uncancel a record from the multiple record GEO Online

Update window, follow the same instruction as for the single record window in the paragraph above. Before canceling, however, be sure that the currently highlighted record is the one to be canceled.

5.3.1.2.3.6 Deleting GEO Records

GEO records can be deleted in three different ways:

- 1. From the single record Change GEO Record window,
- 2. From the multiple record, GEO Online Update window, and
- 3. Through the Auto Delete function.

All three methods are detailed in the paragraphs that follow.

5.3.1.2.3.6.1 Deleting One GEO Record

To delete a GEO record from the Change GEO Record window, a GEO record must first be retrieved and displayed on the window. Once a record is displayed, it is deleted by clicking {**Delete**}. An alert message, as shown in Figure 5.3.1.2.3.6.1-1, forces the user to confirm that the record is, supposed to be deleted. Once the user clicks {**OK**}, the record is deleted; a message appears at the bottom of the window telling the user that one transaction has been committed (saved), and the window is clear, allowing the user to enter a new GEO record.

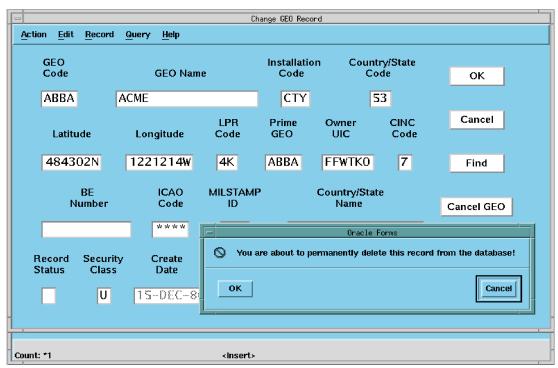


Figure 5.3.1.2.3.6.1-1. Alert Pop-Up Window - Confirm Record Deletion

5.3.1.2.3.6.2 Deleting Multiple GEO Records

To delete a GEO record from the GEO Online Update window, first verify that the record to be deleted is highlighted as the current record. Click {**Delete**}. An alert message pops up, and forces the user to confirm that the record is in fact supposed to be deleted. This message is similar to the pop-up ORACLE Forms window (See Figure 5.3.1.2.3.6.1-1). Once the user clicks {**OK**}, to confirm the deletion, the record is deleted, a message appears at the bottom of the window indicating that a transaction has been committed (saved), and the user moves to the next record in the window.

5.3.1.2.3.6.3 The Auto Delete Function

The Auto Delete function deletes many GEO records at once, depending on a user-specified Cancel Date. To access the Auto Delete function, click {Auto Delete} from the GEO Online Menu Selection window.

Selecting a Cancel Date. The RFA - Select GEO Cancel Date window appears, as shown in Figure 5.3.1.2.3.6.3-1, which allows the user to input a Cancel Date for selecting records to be deleted. Any GEO record with a Cancel Date prior to the one input on this window is considered as a candidate for deletion. The default date that appears is 18 months prior to the current date, but it can be altered to the user's specification.

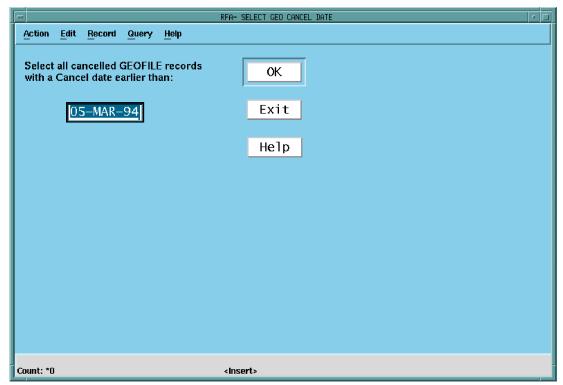


Figure 5.3.1.2.3.6.3-1. RFA - Select GEO Cancel Date Window

Selecting Records for Deletion. Click **{OK}** on the Select GEO Cancel Date window. The RFA - GEO Records to Be Deleted window appears, displaying all records with Cancel Dates prior to the one specified on

the previous window, as shown in Figure 5.3.1.2.3.6.3-2. From this window the user can remove records from the candidate group by highlighting the record in the list, and clicking {**Remove**}. A message appears on the bottom of the window for each record removed, indicating that a transaction has been committed (saved). Any record removed from this group is not deleted when the user clicks {**OK**}.

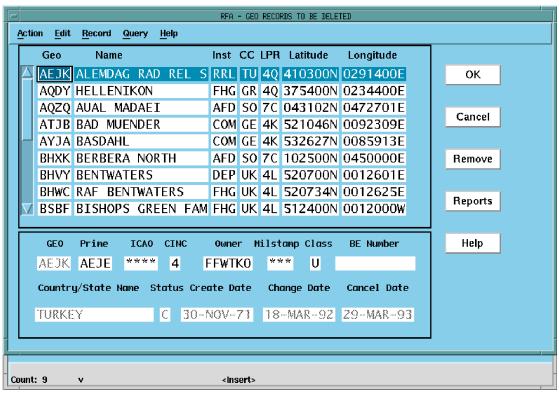


Figure 5.3.1.2.3.6.3-2. RFA - GEO Records to Be Deleted

Viewing a Report. GEO Auto Delete Report is accessible from the RFA - GEO Records to Be Deleted window, and is described in Paragraph 5.3.1.2.3.6.4.

Deleting the Records. Once all records that are not to be deleted have been removed from the list of candidate records; delete all remaining records by clicking **{OK}**. A window appears, displaying how many records will be deleted if the user clicks **{Continue}**, as shown in Figure 5.3.1.2.3.6.3-3. Next, a window appears and asks the user to be patient while the deletion process is taking place (in the case of a large list of candidate records, the deletion may take a few moments to process). Once the delete is complete, control returns to the GEO Online Menu Selection window.

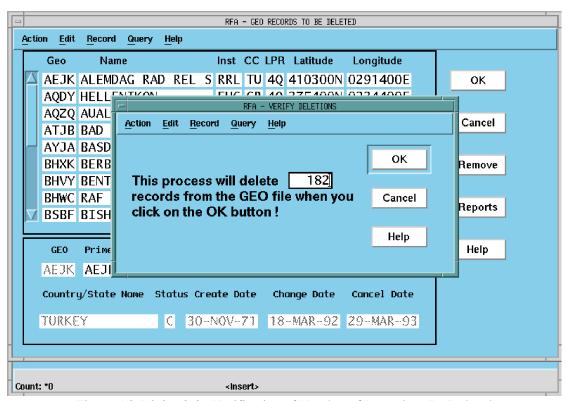


Figure 5.3.1.2.3.6.3-3. Notification of Number of Records to Be Deleted

Canceling/Exiting. To exit out of the Auto Delete function, from the RFA - GEO Records to Be Deleted window, click **{Cancel}**, which returns the user to the RFA - Select GEO Cancel Date window. From here, click **{Exit}**, which returns control to the GEO Online Menu Selection window.

5.3.1.2.3.6.4 GEO Auto Delete Report

From the RFA - GEO Records to Be Deleted window, click {Reports}, which displays a pop up RFA-Verify Deletion window, asking the user to view or print the report. This report gives a listing of all candidate records for deletion, marks those that are going to be deleted with an '*' in the last column. To print a copy of the report, while the report is displayed on the window, click {Print} at the top right corner of the report, select the desired print options, and click {Print} in the print options window. An example of this report can be found in Appendix B.

5.3.1.2.3.7 Finding GEO Records

From the GEO Online Update Window. To find and retrieve an existing GEO record while in the GEO Online Update window, click {Find}. The Find GEO window appears. Enter the GEO code for the record to be retrieved, as shown in Figure 5.3.1.2.3.7-1, and click {OK}. If changes to records that are currently displayed have not been saved, the user is asked if they wish to commit (save) the changes they have made. Once clicking {Yes} or {No} the record to be found is retrieved and displayed. If the user clicks {Cancel}, control returns to the previous record being updated.

Please Note: Click **{Find}** in the GEO Online Update window, and any records that are displayed before the Find is executed are cleared when the **{Find}** record is retrieved.

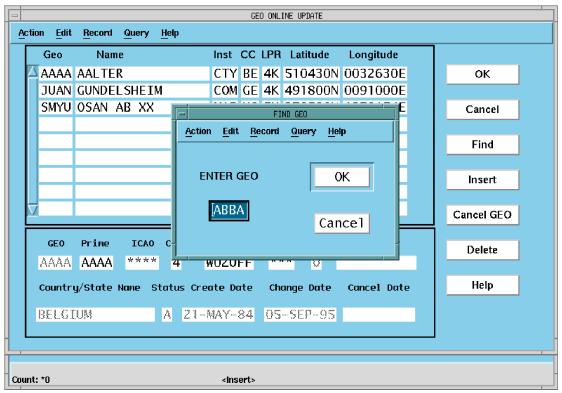


Figure 5.3.1.2.3.7-1. Find GEO Code for Record to be Updated

From the Single Record Windows. To find and retrieve an existing record while in either the Add GEO Record window or the Change GEO Record window, click **{Find}**. The Find GEO window appears. Enter the GEO code for the record to be retrieved, and click **{OK}**; and the record is retrieved. If changes to the currently displayed record have not been saved, the user is asked if they wish to commit (save) the changes they have made, as shown in Figure 5.3.1.2.3.7-2. Once having clicked **{Yes}** or **{No}**, the record to be found is retrieved and displayed. If the user clicks **{Cancel}**, control returns to the previous record being updated.

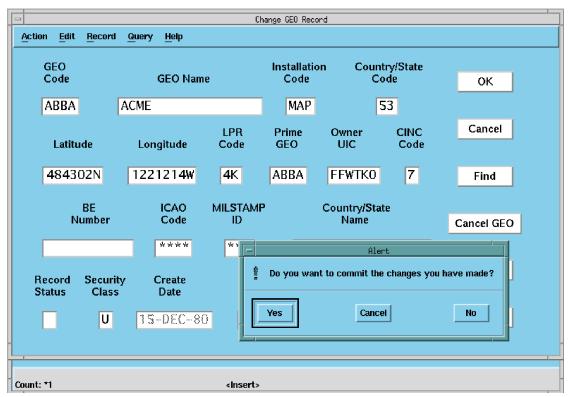


Figure 5.3.1.2.3.7-2. Alert Pop-Up Window - GEO Record Change Commit Query

5.3.1.3 GEO Network Function

The GEO Network function is executed following online update. The Network function processes all updates (adds, changes, and deletes) to the given reference file. (The function generates and executes a SQL script to update the specified reference file on the JOPES Core database servers.) Transactions are also generated in JRS format that can be exported from GCCS to a legacy WWMCCS TS3 mainframe to process reference file updates within the TS3 network.

The Network function consists of four phases:

- 1. Prereduction,
- 2. Transaction Reduction,
- 3. Before/After report, and
- 4. Transaction File Generation.

Each phase executes in sequence for the entire set of updates. At certain points the user may cancel the

function and return to the RFA main menu, if desired. See individual descriptions that follow for more detail.

5.3.1.3.1 Prereduction

The prereduction phase consists of displaying a window, which prompts the user for the name to use for the JRS transaction file to be generated. Figure 5.3.1.3.1-1 shows the RFA-GEO WWMCCS/TS3 Transaction file window that appears.

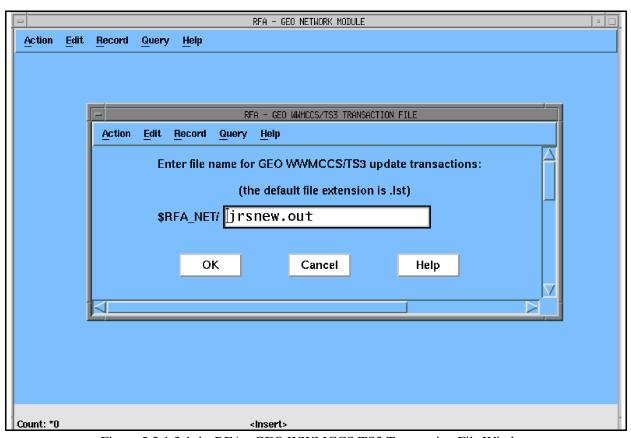


Figure 5.3.1.3.1-1. RFA - GEO WWMCCS/TS3 Transaction File Window

Push Buttons. This window provides the following buttons:

{OK} Allows the user to continue processing.

Cancel Exits the function and returns the user to the RFA main menu.

Help Provides the user with additional assistance.

If **{OK}** is selected, processing proceeds to transaction reduction.

5.3.1.3.2 Transaction Reduction

After confirmation, transaction reduction begins. The transaction reduction phase takes the add, change, and delete transactions and reduces them to one update per database record. Figure 5.3.1.3.2-1 shows the window that appears.

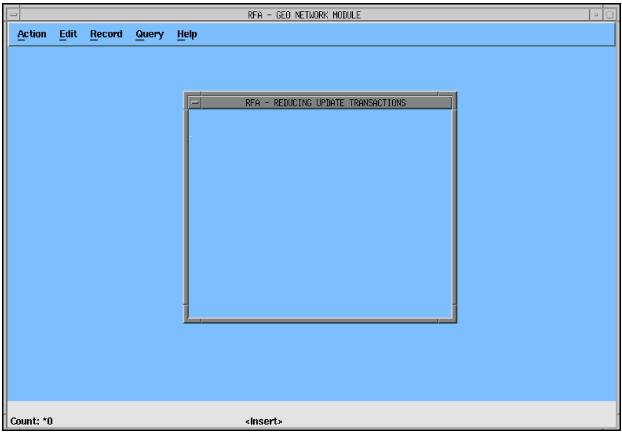


Figure 5.3.1.3.2-1. RFA - Reducing Update Transactions Window

All updates for a particular database record are gathered together and the first and last updates are examined. The reduction is then performed according to the following algorithm:

First Update	<u>Last Update</u>	Reduced Transaction
Add	Add	Add
Add	Change	Add
Add	Delete	No action
Change	Add	Change
Change	Change	Change
Change	Delete	Delete
Delete	Add	Change
Delete	Change	Change
Delete	Delete	Delete

For change transactions, the first and last update are compared field-by-field. If no field was changed other than the creation date of the record or the change date of the record, then no reduced transaction is required;

no reduced transaction is generated for that change. The procedure is repeated for each subsequent database record, until all updates are processed. Processing proceeds immediately to Before/After Report generation.

5.3.1.3.3 Before/After Report

After the transaction reduction is completed, the Update Cycle Report is generated. Figure 5.3.1.3.3-1 shows the RFA - Starting GEO Before/After Report window that appears.

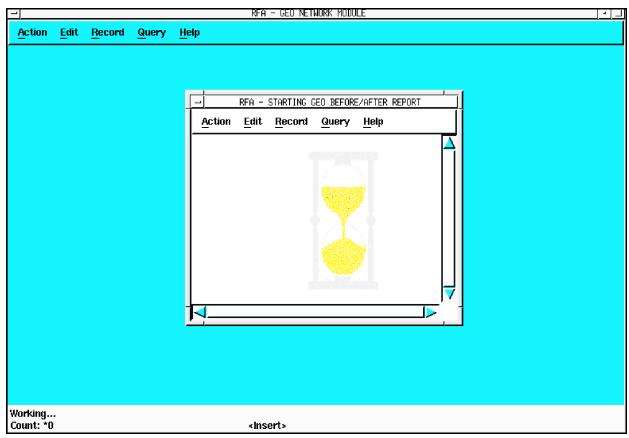


Figure 5.3.1.3.3-1. RFA - Starting GEO Before/After Report Window

The Before/After Report shows the results of reduction of update transactions. For each database table in the reference file a report is generated showing the before and/or after image of each reduced update transaction. Summary information is listed first, followed by detailed transaction listings. An after image is shown for adds, before image for deletes, and both before and after image for changes. Fields modified in the change transaction are highlighted. The generated report is sent to the printer. Appendix B provides report format samples.

The report provided is described as follows:

Geolocation Cycle Update Report. Extracts all adds, changes, and deletes after reduction to the Geolocation reference file. Details include map location (longitude and latitude) of facility, country, type of

facility, place name, logistics planning code, aviation code, and Military Standard Transportation and Movement Procedures (MILSTAMP) ID.

After the report is generated, processing proceeds immediately to transaction file generation.

5.3.1.3.4 Transaction File Generation

The final phase of the Network function is the generation and execution of the SQL script to update the database and JRS-formatted transactions. The Network function executes a separate application enabling the user to determine the successful execution of the SQL script by viewing the contents of the GEO Network Log File. The user may close the application or relocate the window, but should examine the contents of the log file prior to making a selection in the GEO Networked Transaction Counts window. Figure 5.3.1.3.4-1 shows the RFA-GEO Networked Transaction Counts and GEO Network Log File windows that appear.

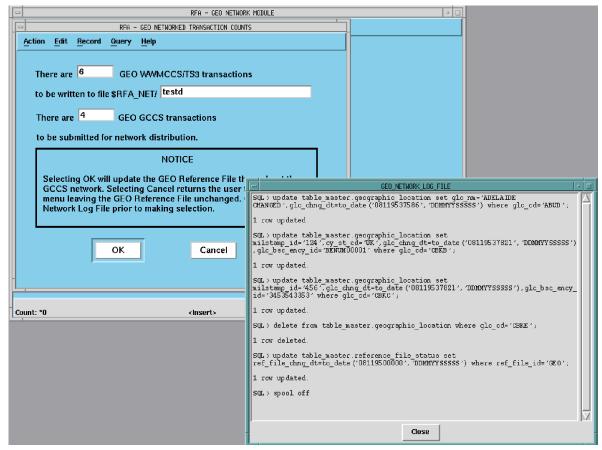


Figure 5.3.1.3.4-1. RFA - GEO Networked Transaction Counts and GEO Network Log File Windows

Push Buttons. The RFA - GEO Networked Transaction Counts window provides the following buttons:

{OK} Updates the GEO reference file on the JOPES Core database servers.

{Cancel} Cancels the function and returns the user to the RFA main menu making no changes

to the GEO reference file on the JOPES Core database servers.

Push Buttons. The GEO Network Log File window provides the following button:

{Close} Exits GEO Network Log File window viewing function and does not effect the RFA software application.

The RFA - GEO Networked Transaction Counts window displays the name and location of the JRS transaction file that is generated and the results of the transaction reduction. For the result, the total number of reduced update transactions and JRS transactions for the reference file are displayed.

Following confirmation, the SQL script and JRS file are generated as ASCII files and written to the directory identified by environment variable \$RFA_NET. Once file generation and execution is complete, the Network function terminates and returns the user to the RFA main menu.

5.3.1.4 GEO Reports

RFA provides an online and hardcopy reporting capability to generate several report types for the GEO reference file. To execute the GEO reports, highlight the {Geolocation File} option from the left side of the RFA main menu, and click {Reports} on the right side, as shown in Figure 5.3.1.4-1. The RFA GEO Reports Menu window appears as shown in Figure 5.3.1.4-2.

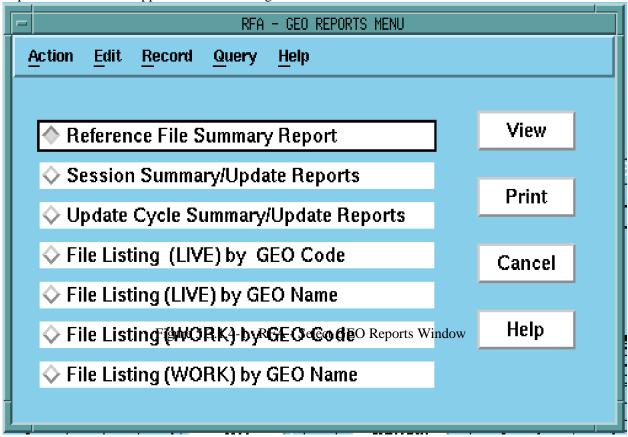


Figure 5.3.1.4-2. RFA - GEO Reports Menu Window

Push Buttons. This window provides the following buttons:

{View} Provides the report on the window.

Print Provides the report on a printer. A pop-up window asks the user for the name

of a particular printer.

Cancel Cancels the process, and returns the user to the RFA main menu.

Help Provides Online Help for the window.

Each report begins with a summary page, which may contain some or all of the following information: USERID, totals for items reported, total pages, sort sequence, start time, end time, and column heading definitions. The following paragraphs provide an overview of each type of report.

5.3.1.4.1 Session Summary/Update Reports

This report lists the add, change, and delete transactions that took place during a user session. Change transactions are reported as before and after images of records updated during a session (See Appendix B for sample report). Details include map location (longitude and latitude) of the facility, country, type of facility, place name, logistics planning code, aviation code, and MILSTAMP ID.

5.3.1.4.2 Update Cycle Summary/Update Reports

This report, which runs from the Network or Reports function, shows the update activity that took place during a complete update cycle. It is similar in format to the Session Update Report with some differences. First, the Cycle Update Report displays the reduced update transactions that took place during the update cycle; whereas, the Session Update report shows every update transaction that took place during a session. The Cycle Update Report summary page shows the total number of update and reduced update transactions, and the Session Update report shows only the total number of update transactions.

5.3.1.4.3 File Listing (WORK) Reports

These reports show all data from the GEO reference file on the RFA application. The user can run this report sequenced by GEO code or GEO name (See Appendix B for sample report).

5.3.1.4.4 File Listing (LIVE) Reports

These reports show all data from the GEO reference file on the GCCS. The user can run this report sequenced by GEO code or GEO name.